STORMWATER MANAGEMENT PLAN

Prepared by:
City of Rogers;
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Permit ARR040041
2015-2019 Update

STORMWATER MANAGEMENT PLAN
General Information

Background and Context

The Rogers Stormwater Management Plan (Stormwater Plan) has been developed to provide policy and management guidance for activities affecting stormwater throughout the City of Rogers (The City). It is intended to help the City fulfill certain State and Federal water quality requirements, and to meet local water resources management objectives. Through the implementation of the policies and management practices embodied in the Stormwater Plan over time, Rogers hopes to preserve urban stormwater quality that negatively impacts local rivers and streams, and to develop and preserve the urban drainage infrastructure in a manner that meets the community's needs for years to come.

While the State and Federal regulatory programs place significant emphasis on improving water quality and the health of Arkansas's watersheds, Rogers, as part of the Illinois River and White River Watersheds further emphasizes the need for local management of urban stormwater and waterways. It becomes even more important that management of these resources occur in a manner that minimizes destructive long-term impacts to drainage infrastructure and the natural features that help protect water quality and control flooding.

Description of the Permit Area

The City currently serves a growing population: 38,829 (2000 census); 48,667 people (2006 special census); and 55,964 (2010 census) within the city limits. This number represents an increase of roughly 44% between the two regular census cycles. The geographic boundaries of the MS4 plan are the City limits and the service area for stormwater planning encompasses approximately 38 square miles. Only about 23 square miles (or 59%) within the city limits of Rogers falls inside the urbanized area as defined by the 2000 census. Based on the Census Bureau's urbanized area limits, portions of both eastern and western Rogers fall outside the urbanized area. The City has complete authority and responsibility for planning, building, operating, maintaining and regulating the stormwater drainage system within the city limits, but not in any of our planning areas that are outside of the city limits (per ADEQ in 2005). Therefore, the MS4 NPDES permit for which this MS4 plan is submitted covers only the area within the City limits.

The City's stormwater management practices have evolved to include efficient and cost-effective approaches that reduce or eliminate stormwater pollution and protect the riparian (stream bank) areas of open waterways. These approaches provide natural pollutant removal and stormwater management capacity. This Ordinance continues to serve as a guide for the City's efforts to develop this Stormwater Plan, other related water resources management efforts, and the creation of a new City drainage manual in 2009 which was adopted.

Article VII of the code's Chapter 14: Development is on-line at
http://library.municode.com/index.aspx?clientId=14712&stateId=4&stateName=Arkansas

Purpose of Plan

The Stormwater Plan characterizes The City's entire stormwater drainage system, including both the open and piped systems, their connections to the streams, and the overall condition of the system. This

characterization is necessary to address relevant State and Federal regulatory requirements and it provides baseline information on which to develop focused stormwater management strategies. The Stormwater Plan establishes goals, policies, and implementation actions that will achieve the City's long-term objectives in a way that is understandable to the public, usable by City staff, and meets regulatory needs. Finally, the Stormwater Plan establishes a means for measuring, reporting, and adaptively managing the City's water resources, by presenting benchmarks that will ensure meaningful progress, as well as ensuring compliance with applicable laws and permit requirements.

Scope and Areas of Focus

The Stormwater Plan addresses stormwater quality management policies and management practices that are be implemented in the City. The scope of the Stormwater Plan is determined primarily by the Federal MS4 permit requirements, but is intended to address local water resources issues as well. These areas of focus in the Stormwater Plan include:

- **ADEQ-required Municipal Separate Storm Sewer System (MS4) Plan elements.** The NPDES Stormwater Program requires that the City submit a MS4 plan in order to acquire a MS4 permit to legally discharge stormwater to the waters of the U.S.
- **Pollution incidents and unlawful (illicit) discharges to the City's stormwater drainage system.** These discharges can be systematic (recurring) or episodic (occasional or one-time) discharges, and include pollutant runoff from parking lots, discharges from industrial outfalls, accidental spills, poor construction site management, and a variety of ways people dump pollutants into street gutters or catch basins.
- **On-site management of stormwater to reduce the quantity of stormwater and pollution entering the drainage system.** Similar to illicit discharges, events that cause flooding, system surcharges, or on-going pollutant loadings are possible both up- and down-stream from the city limits, and originate from a variety of causes. These include inadequacies in the type and design of infrastructure; inadequate maintenance; insufficient erosion and/or sediment control practices; and increases in impervious area without provision for on-site infiltration of stormwater into the ground. The City regulates these issues through implementation of the Rogers Municipal Code within the city limits.
- **Reduction and prevention of pollution at City facilities and resulting from City activities and business practices.** The City provides services with a potential for creating water pollution, erosion, and sedimentation. These include field activities such as ditch cleaning and excavation/maintenance activities, as well as activities at City facilities, such as vehicle washing and maintenance, painting, and material handling such as street sweeper dumping and processing. The Federal NPDES Stormwater Program requires the City to implement pollution prevention practices that reduce or eliminate stormwater pollution from City activities. Beyond this regulatory motivation, it is important that the City lead by example in areas where similar practices and behaviors from citizens and businesses are required.
- **Public education geared toward broad community stewardship of water resources.** The Federal NPDES Stormwater Program places significant emphasis on public education as part of the long-term solution to stormwater pollution. As such, education is a required element of the Stormwater Plan. The long-term success of the City's efforts will hinge on increased awareness and stewardship throughout the community. The Stormwater Plan will result in formal, organized educational and outreach efforts that are targeted broadly throughout the metropolitan area. Many of these efforts are most effectively approached on a Northwest Arkansas Stormwater Compliance Group basis - a cooperative effort between the 15 MS4s located in the Benton and Washington County area and the University of Arkansas' Cooperative Extension Service.
- **Public awareness and involvement in the City's Stormwater management program.** Broad

awareness and participation in the development and implementation of the Stormwater Plan by residents and local area businesses is a key component to ensure effectiveness of the Stormwater Plan. The Stormwater Plan includes a public involvement component in its development that meets the Federal NPDES program

- **Targeted infrastructure improvements and maintenance programs to improve water quality and restore high priority areas.** Concurrent with the updating of the Rogers Drainage Manual, the City will prepare a Stormwater Facilities Master Plan, which will list the City's needs assessment for future drainage infrastructure. The Stormwater Plan will support development and implementation of the Stormwater Facilities Master Plan in a manner that helps meet the City's water quality objectives.
- **ADEQ-required Municipal Separate Storm Sewer System (MS4) Plan elements.** The NPDES Stormwater Program requires that the City submit a MS4 plan in order to acquire a MS4 permit to legally discharge stormwater to the waters of the U.S.

The Federal rules and, therefore, ADEQ's permit requirements, direct that the City's MS4 plan address six minimum areas, which are termed "Minimum Control Measures." These areas are broadly titled in the rules as follows:

1. Public Education and Outreach on Stormwater Impacts;
2. Public Involvement and Participation;
3. Illicit Discharges Detection and Elimination;
4. Construction Site Stormwater Runoff Control;
5. Post-Construction Stormwater Management for New Development & Re-Development;
6. Pollution Prevention in Municipal Operations;

Under each of these areas described above, the City's MS4 plan must contain the following information:

- The structural and non-structural Best Management Practices (BMPs) that the permittee or another entity will implement for each of the stormwater Minimum Control Measures;
- The measurable goals and benchmarks for each of the BMPs including, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action; and
- The person or persons responsible for implementing or coordinating the BMPs for the permittee's MS4 plan.

Overview of Rogers's Stormwater Drainage Systems

The City is responsible for implementing surface water management activities within its boundaries, including the planning, design, construction, operation, and maintenance of the stormwater drainage system. The City performs all operation and maintenance on the public drainage system that is designed and constructed to City standards and located within easements or rights-of-way, or real property that has been conveyed or dedicated to the City. The City also maintains open channels throughout the city, and public outfalls to natural streams within the City's jurisdiction. The geographic area covered by this Plan includes roughly 38 square miles inside the Rogers' city limits.

The City's metropolitan area's stormwater drainage systems also include some private (commercial, industrial & residential) stormwater management facilities that help moderate and reduce the volume and pollutant content of stormwater leaving private property and entering the public stormwater drainage system and/or local streams.

Stormwater Drainage Basin Characterization

Surface water runoff from Rogers drains several directions. Water draining east travels through unincorporated portions of Benton County to Beaver Lake, the White River, Missouri and then back in to

Arkansas. Runoff draining west-southwest passes through neighboring Cave Springs to the Illinois River, and Oklahoma. There is also a modest amount of Rogers' area drains west-northwest through the neighboring communities of Little Flock and Bentonville via tributaries of Sugar Creek to the Elk River and Missouri, which eventually drains back to the west and southwest to the Arkansas River Watershed via the Neosho River in Oklahoma.

The City is broken down into several separate tributaries to each of these streams. A drainage basin can be described as a geographic area within which stormwater drains from many small systems converging on a larger drainage way, ultimately culminating in outfalls to the three (3) major drainage ways. The character and condition of the drainage ways varies significantly throughout the basins, depending on surrounding land uses and contributing drainage.

Goals, Policies, and Implementation Actions

This section provides overall guidance to the City in performing stormwater management activities in a manner consistent with State and Federal laws, while meeting local goals and the long-term outcomes the City hopes to achieve. The following goals are derived from long-term key outcomes that have been reviewed. The policies provide specific direction, consistent with the local goals, State and Federal requirements. Implementation actions include BMPs discussed in detail in the MS4 plan and other actions needed to achieve local objectives. The work plan for completion of Implementation actions is in the Stormwater Plan Implementation Action Summary.

GOAL 1: Protect citizens and property from flooding.

Policies

1.1 Maintain surface drainage in the City to reduce the threat of flooding, through proper maintenance of the City's stormwater drainage system and other infrastructure, with practices that are protective of water quality.
1.2 Through the development review process, ensure that new development incorporates adequate stormwater management and infrastructure to avoid up- and down-stream capacity and water quality problems.
1.3 Create and preserve open stormwater drainage networks, where feasible, to best accommodate peak storm flows while providing and maintaining flood storage capacity as well as promoting and improving water quality.
1.4 Adhere to standards, policies, and practices which comply with Federal Emergency Management Agency (FEMA) Flood Management Program requirements to insure that the City maintains flood insurance coverage under this program.

Implementation Actions

1.A. Continue evaluation of City maintenance practices. Implement appropriate BMPs to assure that the City adequately maintains the stormwater drainage system capacity in an environmentally responsible manner.
1.B .Evaluate and refine the City's drainage program, including education, outreach, inspection, and enforcement components to reduce the negative stormwater impacts from land alteration, erosion, sedimentation, and excessive runoff.
1.C. Continue to review the City's Drainage Manual. Assess the public stormwater drainage system and capacity needs. Identify capital improvements and other measures necessary to maintain and provide adequate system capacity for planned community growth.
1.D. Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to ensure that residents, businesses, and industries within our jurisdiction are aware of the importance of preventing pollution from entering the streams and water bodies of the State.
1.E. Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to minimize or eliminate erosion and sedimentation in the stormwater drainage system due to new construction.
1.F. Implement BMPs consistent with NPDES Minimum Control Measure #5, Post-Construction Stormwater Management for New Development and Redevelopment, to ensure that new development is in compliance with Local, State and Federal flow-regulating and water quality management practices, such as detention ponds, on-site stormwater storage, etc.
1.G. BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, to ensure adequate creation, maintence, and inspection of the stormwater system.

GOAL 2: Improve surface and sub-surface waters for aquatic life and other beneficial uses.

Policies

2.1 The City will monitor and implement practices and regulatory programs with the objective of improving surface and groundwater quality to, at a minimum, meet State water quality standards, adequately protect threatened and endangered wildlife, and meet the State beneficial use guidelines.
2.2 The City will maintain its open channels and waterways in a manner that is protective of their natural hydrologic and stormwater management and other habitation functions for the benefit of the citizens of the City, local wildlife (including threatened or endangered species), and for future generations of both.

Implementation Actions

2.A. Promote pollution protection educational efforts, including signage, development project review, and public outreach.
2.B. Enhance erosion and illicit discharge detection and compliance efforts, including permitting and Code enforcement.
2.C. Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to enhance citizens' and businesses' knowledge regarding water quality regulations as well as the benefits to the community from properly functioning waterways.
2.D. Implement BMPs consistent with NPDES Minimum Control Measure #3, Illicit Discharges Detection and Elimination, to eliminate or minimize toxic discharges from business and industry.
2.E. Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to minimize sedimentation and channel degradation from construction sites.
2.F. Implement BMPs consistent with NPDES Minimum Control Measure #5, Post-Construction Stormwater Management for New Development and Re-Development, to ensure long-term functioning of newly- and re-developed sites.
2.G. Implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, to ensure that municipal properties - including the stormwater drainage system - are maintained in properly-functioning and environmentally-friendly conditions.

GOAL 3: Preserve and maintain surface waters, wetlands, and riparian areas.

Policies

3.1 Through the development plan review process, the City will ensure that development is protective of significant open waterways, wetlands, and riparian areas that meet historical, existing, and future needs.
3.2 The City will implement permitting programs, educational outreach, compliance inspections and enforcement activities as needed to reduce erosion, sedimentation, illicit discharges, and other pollution impacts to the City's waterways.

Implementation Actions

3.A. The City will review and refine its drainage program, which addresses erosion, sedimentation, and the impacts of land alteration, including permitting, inspections, technical education, public outreach, and enforcement.
3.B. The City will review development proposals for impacts on open drainage ways, wetlands, and riparian areas, and protect the functions and benefits of these areas as provided for in the Municipal Code; Design Standards; and other regulations, guidelines, and requirements
3.C. The City will work cooperatively with citizens, businesses, and agencies to protect and improve surface waterways, seek opportunities for stewardship partnerships, further enhance educational opportunities, and continue participation in intergovernmental work groups.
3.D. The City will implement and continue to refine/improve BMPs for all City activities with potential to impact water quality and/or the functions of waterways, wetlands, and riparian areas.

3.E. Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to reduce or eliminate sedimentation from construction sites as one of several contributors to poor water quality and quantity management.
3.F. Implement BMPs consistent with NPDES Minimum Control Measure #5, Post-Construction Stormwater Management for New Development and Redevelopment, so developments maintain the function and capacity of the stormwater drainage system, as well as preventing the contribution to future degradation of either.
3.G. Implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, which is critical to maintaining properly functioning wetlands, riparian areas, open channels, and the overall system.

GOAL 4: Citizens, businesses, and industries understand the need to protect water quality.

Policies

4.1 The City will develop targeted education and outreach and technical assistance programs regarding practices and obligations for keeping debris and pollutants out of the stormwater drainage system and train stakeholder groups in appropriate erosion control and sediment prevention practices, as well as stormwater management BMPs.
4.2 The City will seek to form partnerships with neighborhoods and other community groups interested in providing stewardship of local waterways.
4.3 The City will develop, implement, and enforce appropriate development design, and Municipal Codes to address water quality compliance issues, including pollution, habitat, and aesthetic issues, to encourage the development of urban waterways that are positive amenities in the community.

Implementation Actions

4.A. The City will continue to support outreach and education efforts regarding water quality, riparian and wetland areas, including business, contractor, resident, and developer outreach programs to educate these parties about their impacts on stormwater quality.
4.B. Continue maintenance, enforcement, and compliance activities - including inspections, technical assistance, and Code enforcement.
4.C. Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to engage the public in the efforts to create positive urban amenities.
4.D. Implement BMPs consistent with NPDES Minimum Control Measure #3, Illicit Discharges Detection and Elimination, to ensure that waterways are safe; meet Local, State, and Federal water quality standards; and can function as amenities to the whole region.

GOAL 5: Urban drainage ways become community amenities.

Policies

5.1 The City will conduct education and outreach activities to appropriate target groups to increase understanding of the importance of maintaining safe and clean drainage ways, and to seek volunteers willing to be caretakers for water features near them.
5.2 The City will (through the Municipal Code of Ordinances and Rogers Drainage Manual) protect existing significant open waterways and encourage through site planning and landscaping the creation of additional areas that enhances the attractiveness and natural functions of the water features.
5.3 The City will maintain all drainage ways in a manner that provides for safe and attractive conditions within the limits of its fiscal constraints.

Implementation Actions

5.A. Enhance the City's erosion control program, including educating developers and the community regarding the positive aspects of open waterways to promote acceptance, and integrating effective compliance and enforcement components.
5.B. Provide adequate funding within the City's restraints for public maintenance of the stormwater drainage system, and ensure ongoing maintenance of private stormwater features through development agreements.
5.C. Increase educational outreach to schools and other youth groups to increase awareness of children regarding the need to keep litter and pollutants out of urban drainage ways.
5.D. Implement all six of the NPDES Minimum Control Measure BMPs. Implementing all of the provisions of the MS4 plan will ultimately result in improved water quality and quantity management, improved habitat and resource protection, and, ultimately, enhance urban waterways as desirable community amenities.

Rogers' NPDES MS4 Plan

City Stormwater Management Program - Responsible Parties

The City is responsible for implementing surface water management activities within its boundaries, including the planning, design, construction, operation, and maintenance of the stormwater drainage system. In response to the NPDES Phase II stormwater requirements, the City has developed a MS4 plan addressing each of the six required Minimum Control Measures, as specified in the Federal-NPDES Phase II rules. The City's stormwater management program is the responsibility of the Planning and Transportation Department. Other departments within the City of Rogers will receive training to recognize stormwater issues related to their facility, the fieldwork they do, and for reporting these and other activities around the municipality to the Planning and Transportation Department for review, investigation, education, enforcement, and/or legal action. Public Education and Involvement would also be encouraged with their co-workers, families, and neighbors.

City Organization Chart – Appendix Page 1
Rogers Water Utilities Chart – Appendix page 2

NPDES Phase II BMP Requirements

Specific BMPs are proposed for each Minimum Control Measure (MCM), which are intended to support the reduction of discharges of pollutants in stormwater runoff to the maximum extent practicable (MEP) as required by the Federal-NPDES Phase II rules. Each MCM section provides the following information:

- A list of planned BMPs (proposed MS4 plan activities);
- A brief explanation of the BMP;
- A list of the responsible parties for the implementation;
- A summary of measurable goals for the planned BMPs; and
- A development/implementation schedule summary listing each BMP's activity, topic emphasis and target audience for each year; and the rationale for each topic chosen.

The BMP schedule shows when certain activities will be completed on a calendar year basis. More specific dates are not given since weather (drought, flood, and/or "normal") conditions as well as the availability of funds from future city budgets may affect the timeline for the various actions. Early or late completion of one activity may also affect the schedule for starting or finishing the next one.

A. Minimum Control Measure #1:
Public Education and Outreach on Stormwater Impacts

Permit Requirements: Regulation 40 CFR 122.34(b)(1): "The permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff."

Decision Process

The City of Rogers participates in monthly meetings of the NWA Stormwater Compliance Group. We also have representation on the NWA Stormwater Education Steering committee (public membership comprised of diverse backgrounds/interests) convenes at least once each year to review and evaluate program accomplishments and plan next steps. Both groups provide the localized input used to identify critical stormwater issues and target audiences and program methods and public relations strategies.

Applicable Public Education/Outreach BMPs

Develop and distribute electronic and printed educational materials

Input from both the MS4 Stormwater Compliance Group and Education Steering Committee guides the emphases of electronic and printed educational materials. Once topics have been identified, materials will be developed, adapted, and/or gathered for distribution at public meetings, in support of presentations, and with educational displays. Examples may include fact sheets, podcasts, e-learning modules, website content, newsletters, press releases, and PSAs.

Measureable Goals:

A minimum of 20 electronic and printed educational materials will be developed.

The number of educational materials distributed will be documented.

MS4 Stormwater Compliance Group and Education Steering Committee meetings attendance will be documented.

Create displays and staff educational booths

Displays highlighting the annual topics of emphasis will be created and set up/staffed at libraries, banks, schools, local festivals, county fairs, etc.

Measureable Goal:

Stormwater displays will be created and used at a minimum of 5 events/locales

Conduct stormwater programs for adult audiences

Educational presentations will be given to illustrate stormwater dynamics, identify potential pollutants and pathways, describe techniques to reduce stormwater pollution and encourage voluntary BMP implementation according to the annual topic/audience emphases outlined in the SWMP.

Measureable Goal:

At least 10 stormwater education programs will be conducted for adult audiences

Conduct hand-on youth stormwater/water quality education programs

Educational programs for school youth will focus on the water cycle, watersheds, stormwater dynamics, water quality and pollution prevention using the EnviroScape surface runoff model, groundwater simulator, hands-on exercises from Project WET, Project WILD, and Project

Learning Tree and creekside classrooms. Programs conducted will support the Arkansas State Frameworks/Common Core required curriculum.

Measureable Goals:

At least 20 stormwater education programs will be conducted for youth audiences

Responsible Party

The Northwest Arkansas Regional Planning and the University of Arkansas Cooperative Extension Service has contracted with the municipality to be responsible for the development and implementation of the public education efforts. A copy of that agreement is included in this plan.

Performance Standard:

Urban stormwater outreach/education programs will reach at least 27,449 residents (50% of the urbanized area population).

Minimum Control Measure #1:
5 Year Implementation Schedule

2015	2016	2017	2018	2019
Topic Emphases: Yard and garden management	*Topic Emphasis:* Automotive maintenance	*Topic Emphasis:* Septic system and pool maintenance	*Topic Emphasis:* Litter/trash management	*Topic Emphasis:* Irrigation management to minimize runoff/ disconnecting impervious surfaces
Target Audience: Homeowners and garden enthusiasts	*Target Audience:* Vehicle owners	*Target Audience:* Homeowners with septic systems/ pools	*Target Audience:* General public, homeowners	*Target Audience:* Homeowners and businesses with irrigation systems and guttering
Rationale: Improper yard waste disposal can clog storm drains and excess fertilizer and pesticide applications can contaminate stormwater with nutrients and chemicals	*Rationale:* Leaking automotive fluids and washing vehicles on paved surfaces allow oil, grease and chemicals to be carried in stormwater to local waterways	*Rationale:* Malfunctioning septic systems, improper handling and disposal of pool chemicals and emptying chlorinated pool water can impact stormwater quality	*Rationale:* Improper handling and disposal of litter can allow it to enter the storm drain system and impact stormwater quality	*Rationale:* Efficient irrigation conserves water and prevents it from entering the storm drain system while disconnecting impervious surfaces minimizes runoff by enhancing infiltration

B. Minimum Control Measure #2:
Public Involvement/Participation

Permit Requirements: The permittee must, at a minimum, comply with State and local public notice requirements when implementing a public involvement/participation program.

Decision Process

The City of Rogers participates in monthly meetings of the NWA Stormwater Compliance Group. We also have representation on the Stormwater Education Steering committee (public membership comprised of diverse backgrounds/interests) convenes at least once each year to review and evaluate program accomplishments and plan next steps. Both groups provide the localized input used to identify critical stormwater issues and target audiences and program methods and public relations strategies.

Applicable BMPs

Engage Residents in Stormwater Policy Development

Input from both the MS4 Stormwater Compliance Group and Education Steering Committee guides the emphases of electronic and printed educational materials. Once topics have been identified, materials will be developed, adapted, and/or gathered for distribution at public meetings, in support of presentations, and with educational displays. Examples may include fact sheets, podcasts, e-learning modules, website content, newsletters, press releases, and PSAs. (This item to be tracked and documented within Public Education/Outreach, MCM #1)

Measureable Goals:

The number of educational/announcements materials distributed will be documented. (see MCM #1)

MS4 Stormwater Compliance Group and Education Steering Committee meetings attendance will be documented. (see MCM #1)

Train and Utilize Volunteer Educators

"Train-the-trainer" processes will be used to engage public volunteers and educators in teaching stormwater and pollution prevention (e.g. Benton and Washington County Master Gardeners, Master Naturalists, LakeSmart Leaders, etc.)

Measureable Goal:

At least 5 train-the-trainer programs will be conducted.

C*onduct Public Participation/Involvement Events*

Citizen and youth groups will participate in public involvement events (litter pick up, establishing demonstration rain gardens, planting riparian vegetation, stenciling storm drain inlets, etc.).

Measureable Goal:

At least 5 public participation events will be coordinated.

Responsible Parties

The jurisdiction is responsible for the development and implementation of the public involvement and participation efforts, utilizing the services of the University of Arkansas Cooperative Extension Service (contracted through the Northwest Arkansas Regional Planning Commission).

Performance Standard

At least 5 public participation and involvement activities will be conducted.

Minimum Control Measure #2:
5 Year Implementation Schedule

2015	2016	2017	2018	2019
Program Emphasis: Engage organizations (such as Master Gardeners, POAs and lawn care/landscaping professionals) to promote stormwater pollution prevention education	*Program Emphasis:* Engage HHW Collection Centers and automotive shops to promote their vehicle fluid collection	*Program Emphasis:* Partner with POAs, Health Department and watershed organizations to promote proper septic system function through inspections and regular pumping	*Program Emphasis:* Coordinate clean up events (potential locations: creek, lake, park, trail or roadway)	*Program Emphasis:* Partner with the Arkansas Irrigation Association to promote proper irrigation system use/maintenance
Target Audience: Homeowners, lawn care/landscaping professionals	*Target Audience:* Vehicle owners, automotive maintenance professionals	*Target Audience:* Homeowners with septic systems or swimming pools	*Target Audience:* MS4 residents	*Target Audience:* Homeowners and businesses with irrigation systems
Rationale: Improper management of grass clippings and leaves can clog storm drains and excess fertilizer and pesticide applications can contaminate stormwater with nutrients and chemicals	*Rationale:* Improper handling/ disposal of automotive fluids allow oil, gasoline and other vehicle fluids to be transported in stormwater to local waterways	*Rationale:* Malfunctioning septic systems, improper handling and disposal of pool chemicals and emptying chlorinated pool water can impact stormwater quality	*Rationale:* Improper handling and disposal of litter can allow it to enter the storm drain system and impact stormwater quality	*Rationale:* Efficient irrigation conserves water and prevents it from entering storm drain systems

Minimum Control Measure #3:
Illicit Discharges Detection and Elimination

Permit Requirements:

The permittee must:

- Develop, implement and enforce a program to detect and eliminate illicit discharges [as defined in 40 CFR §122.26(b)(2)] into the permittee's small MS4, including notifying adjacent interconnected MS4 when discharges occur;
- Develop and continue to update a storm sewer system map, showing the location of all outfalls and the names and location of all waters that receive discharges from those outfalls, including catch basins, pipes, ditches and public and private stormwater facilities;
- Effectively prohibit (through ordinances or other regulatory mechanisms to the maximum extent allowable under Local, State, and Federal laws) non-stormwater discharges into the permittee's storm sewer system and implement appropriate enforcement procedures and actions for non-compliance;
- Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the permittee's system;
- Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste to the stormwater system;
- Address all categories of non-storm water discharges or flows (illicit discharges) if identifies as

significant contributor of pollutants to the permittee's small MS4;

- Develop a list of occasional incidental non-storm water discharges that will NOT be addressed as illicit discharges because of reasonably expectations (based on information available) that the source would not be a significant source of pollutants. These will primarily be due to the nature of the discharges or conditions the City of Rogers' storm water management program plan has established for allowing these discharges to the permittee's MS4; and
- Develop a process to respond to and document complaints relating to illicit discharges.

Applicable City of Rogers BMPs

Illicit Discharge Detection and Elimination **(IDDE):**
IDDE1 - Ordinance: Reviews and Revisions
IDDE2 - Reporting and Response System for Suspicious Discharges
IDDE3 - Tracking and Enforcement of Illicit Discharges
IDDE4 - Outfall Inventory
IDDE5 - Outfall Mapping
IDDE6 - Citywide Illicit Discharge Detection and Elimination Plan
IDDE7 - Collecting, Identifying, and Assessing Non-Stormwater Discharges

Rationale

Rogers selected the above seven BMPs to address this requirement. IDDE1 includes an annual review of the existing stormwater ordinance to compare against both other city ordinances as well as the appropriate state regulations. If any deficiencies are found then department and city policies for updating the ordinance shall be followed by the Planning Department's personnel. IDDE2, IDDE3, and IDDE 6 describe the City's processes that respond to and document complaints regarding water quality (including illicit discharges) as well as The City's program to prohibit and enforce elimination of illicit discharges. These two BMPs, reporting/response and tracking/enforcement, will work in conjunction and include several methods for reporting presumed illicit spills, sightings and discharges as well as follow-up procedures. Most of the City department's personnel, while doing their daily jobs will report potential illicit problem areas to the Director of Planning & Transportation, or his/her designee. The problem area will be investigated as soon as practically possible and depending on the situation. All infractions will be brought to the owner's attention, followed up on, and an investigation report to the Illicit Complaint files complete with pictures and the investigation results. Larger incidents with water bodies, fish kills with unknown circumstances will also be reported to State Fish and Wildlife and/or the ADEQ for their expertise and water quality measurement capabilities. These three IDDE BMPs also include publicizing of the Planning & Transportation Department's phone number for complaints and protocols for the most efficient and effective follow-up actions in response to calls as well as the phone number for the Police and Fire Departments for emergency and warranted after-hours reporting of obviously environmentally-dangerous spills (i.e. almost any petroleum product)

IDDE4 and IDDE5 will work together to continue a project began in the previous permit cycle to update the stormwater inventory and map of the City's Stormwater System. As outfalls continue to be visited during dry periods, the channels will be walked to look for new or previously unmapped outfalls. Outfall maps will be reviewed for completeness; completed where information is missing; updated as new development occurs; and maintained during the permit period. The map was created by using GPS and AutoCAD by a consulting engineering firm. All information is reviewed by City personnel as additional information is provided to compare against older versions of the map or its information. The map will continue to be updated as needed by the Planning Department. New development designs will be required for all newly platted areas. As-built construction drawings showing streets, inlets and development tie-ins to existing storm drains or outfalls from the development will be required to be submitted on AutoCAD so they can be transferred from the development drawings to the City's digital copy of the storm sewer map.

Activities conducted under IDDE6 will partner with IDDE2 and IDDE 3 to inform the public about the hazards of illicit discharges is implemented through several of the public education outreaches by both the City and their education partner - the University of Arkansas' Cooperative Extension Service. IDDE7 will address the collection, identification, and assessment non-stormwater discharges. Discharges determined to adversely impact the stormwater system will be followed up by appropriate management practices or regulations will be used, developed, and/or implemented - including enforcement of any municipal regulations available.

Responsible Parties

- Director of Planning & Transportation and/or his/her designee
- Rogers Water Utilities laboratory, Inflow and Infiltration (I-N-I), and inspection staff members
- Rogers Street Dept. personnel, as needed
- Contracted companies and their employees as directed by the Director of Planning & Transportation

Summary of Measurable Goals

The goals below were selected to correspond with goals from the previous permit cycle to that progress could continue towards achieving reductions and eliminations of non-stormwater discharges to the stormwater system. Some previous goals were divided into separate tasks to better review progress on each while other objectives were more clearly defined so that the assigned personnel have a better idea of what is involved in completing the task. All goals will be annually monitored, reviewed, evaluated and assessed by an individual within the Planning Department with stormwater oversight, but not by the program's coordinator. The measurable goals of the illicit discharges program during the 5-year permit period include, but are not limited to:

- Monitor and revise existing ordinances to meet new federal and state permit requirements.
- Develop and implement a system to monitor, document, and track the number and type of calls received each year and the actions taken in response.
- Annually visit a minimum of 20% of the known outfalls for a dry-weather screening. Areas visited should overlap with developed and/or mapped areas to search for undocumented and previously unknown outfalls. Receiving streams (local and ultimate) of all waters will be documented on the field inventory sheets and added to the storm sewer system's digital information.
- Document an annual review of outfall maps of the storm sewer system to ensure they are up-to-date. All maps cover the city limits of Rogers (not just the Urbanized Area) and include the name of each local and regional receiving stream.
- Monitor the number of illicit discharges that are encountered and document enforcement procedures that are conducted.
- Implement and enforce a program to detect and eliminate illicit discharges. The program will include regulatory and enforcement mechanisms and will be evaluated annually.
- Monitor the number of commercial/industrial uses assessed for possible illicit discharges and document resolution of illicit discharges identified.
- Complete an assessment of non-stormwater discharges along with implementing local controls where identified as needed.

Summary of Development/Implementation Schedule

BMP#	PERMIT YEAR				
	YR 14-15	YR 15-16	YR 16-17	YR 17-18	YR 18-19
IDDE1	Review and revise stormwater, grading, erosion control, and tree ordinance as needed.				

BMP#	PERMIT YEAR				
	YR 14-15	**YR 15-16**	**YR 16-17**	**YR 17-18**	**YR 18-19**
	Review existing ordinance for master Municipal Code revisions.	Review existing ordinance for MS4 permit requirements.	Draft revisions to existing ordinance due to MS4 permit requirements.	Monitor and draft any revisions needed due to NWA Construction BMP manual adoption.	Monitor and revise existing ordinance for new EPA MS4 permit requirements.
	Check for completeness of ordinance due to relocation within Municipal Code.	Check for shortages between existing ordinance and new permit requirements.	Remove shortages between existing ordinance and new permit requirements.	Remove un-permitted and add new allowed BMPs per newly adopted BMP manual.	Prepare for new federally required requirements that will be applicable with next state permit.
IDDE2	Encourage Rogers' residents and businesses to report to City Hall suspected illegal dumping and suspect liquid discharges in and near our drainage ways.				
	Create and adopt system for citizen reports and municipal responses to suspected dumping and suspicious liquid discharges within city limits.	Landscape stormwater management and water conservation	Monitor and revise as needed the system for citizen reports and municipal responses to suspected dumping and suspicious liquid discharges.	Water quality monitoring	Stream clean-ups
IDDE3	Tracking illicit discharges and enforcing policies and ordinances.				
IDDE4	Get the library of background materials found in the various waterway from the Rogers Water Utilities' samples of past water collections.	Get the library of chemicals and other parameters found in the Rogers Water Utilities' pre-treatment samples of past water collections.	Annually review Report and Response System for repeat violators of ordinance (location; owner/operator; other individual). Apply existing code enforcement options.		
IDDE5	Inventory stormwater outfalls of unmapped outfalls				
	Continue annual inventorying 20% of known stormwater outfalls - overlap areas visited with areas of "missing" suspected outfalls and connections to stormwater drainage system AND areas of new development and/or redevelopment.				
	Monitor and annually revise the outfall inventory for newly built and/or located outfalls, system expansions or extensions, and/or locations previously outside of city limits of Rogers.				
	City employees and contract companies for locating unmapped outfalls. Engineers, designers, contractors, builders and other construction community personnel on newly installed outfalls.				
	When a discharge has been reported, knowing the upstream system from the report can make it easier to track back to locate the source of the discharge.				
	Continue annual inventorying 20% of known stormwater outfalls - overlap areas visited with areas of "missing" suspected outfalls and connections to stormwater drainage system AND areas of new development and/or redevelopment.				
	Monitor and annually revise the outfall inventory for newly built and/or located outfalls, system expansions or extensions, and/or locations previously outside of city limits of Rogers.				
IDDE6	Encourage Rogers' residents and businesses to report to City Hall suspected illegal dumping and suspect liquid discharges in and near our drainage ways.				

<table>
<tr><th rowspan="2">BMP#</th><th colspan="5">PERMIT YEAR</th></tr>
<tr><th>YR 14-15</th><th>YR 15-16</th><th>YR 16-17</th><th>YR 17-18</th><th>YR 18-19</th></tr>
<tr><td></td><td>Review plan for definitions of illegal versus illicit discharges.</td><td>Review plan for shortfalls</td><td colspan="2">Develop and implement pollution practices and policies for each city-operated site to prevent pollution and reduce possibility of stormwater discharge carrying pollution.</td><td>Review plan for shortfalls compared to new federal MS4 permit that will take affect with next state permit.</td></tr>
<tr><td rowspan="3">IDDE7</td><td colspan="5">Visit a minimum of 20% of known outfalls per calendar year for dry weather-screenings to assist in the location of non-stormwater discharges and to identify what the discharge material(s) is (are). Areas covered should overlap with areas of previous development to locate previously unmapped outfalls.</td></tr>
<tr><td>Get the library of background materials found in the various waterway from the Rogers Water Utilities' samples of past water collections.</td><td colspan="4">Have all dry-weather screenings' liquid samples tested for content by Rogers Water Utilities treatment plant laboratory personnel. Add results to relevant library and do additional reporting of discharge if required by law. Trace all discharges back to source. Educate personnel on source site and/or apply existing code enforcement options.</td></tr>
<tr><td>Get the library of chemicals and other parameters found in the Rogers Water Utilities' pre-treatment samples of past water collections.</td><td colspan="4">Have all unknown/unidentified solids collected and tested by proper personnel. If required, report solids location. Remove solids by properly trained personnel. Educate personnel on source site and/or apply existing code enforcement options.</td></tr>
</table>

Minimum Control Measure #4:
Construction Site Runoff Regulations and Controls

Permit Requirements:

"The permittee must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the permittee's small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the permittee's program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more." For stormwater discharges associated with any construction activity must comply with 40 CFR §122.26(b)(15)(i) by developing, implementing, and enforcing a program to reduce pollutant discharges from such sites. The permittee's program must include the development and implementation of, at a minimum:

- An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under Federal, State or Local laws;
- Requirements for site operators to implement appropriate erosion and sediment control Best Management Practices;
- Requirements for construction site operators to prevent or control waste that may cause adverse impacts to water quality such as building materials and their packing systems, concrete truck washout, chemicals, litter, equipment & fluid leaks, and sanitary waste at the construction site;

- Procedures for site plan review and land division that incorporate measures to prevent or control potential water quality impacts;
- Procedures for receipt and consideration of information submitted by the public; and
- Procedures for site inspection and enforcement of control measures.

Applicable City of Rogers BMPs

Construction Regulations and Controls **(CRC):**
CRC1 - Ordinance: Reviews and Revisions
CRC2 - Plan Reviews
CRC3 - Drainage Manual
CRC4 - Site Inspections
CRC5 - Complaint Reporting and Response System
CRC6 - Enforcement
CRC7 - City Staff Training

Rationale

The City selected the above BMPs to address each component of the construction site runoff control requirements. Regulatory authority for implementation and enforcement of the City's erosion and sediment control program is provided in the Stormwater Ordinance, Municipal Codes, and other adopted guidelines. These Codes and guidelines provide a framework for oversight of erosion and sediment control measures during construction or redevelopment of any site. This permit creates documentation of new housing sites, provides an avenue for pre-construction meetings, and produces a format for random site reviews. Specific requirements for construction site operators are addressed during the Site Plan Reviews, Grading Permit application processes, Technical Plat Reviews, SWPPP review processes, and are included in the City's Design Criteria as referenced in the Development Code. The Stormwater Ordinance requires the development of erosion and sediment control plans and will be updated to include issues provided by the updated ARR040000. Additionally, the nuisance prohibitions section of the Code of Ordinances provide authority to regulate construction sites to prevent or control wastes that can adversely impact water quality. Training of City staff to recognize and correct erosion problems on construction sites and to enforce the provisions of the City's adopted ordinances is a critical component of the continuous and on-going stormwater management program.

Responsible Parties

The City's Planning Department maintains the portion of the Municipal Code of Ordinances related to construction and coordinates the Site Plan and Drainage Review process. The Planning Department staff is responsible for implementation and inspection of approved land alteration and development projects for overall development criteria as well as erosion and sediment control and construction site runoff controls. Other departments' personnel help the Planning Department become aware of land disturbances that are occurring but may not have been through the plan review process. Enforcement of these areas of the City's Codes is conducted in coordination with the Code Enforcement and Police Departments - and with the Office of the City Attorney, if necessary.

Summary of Measurable Goals

The goals below were selected to correspond with goals from the previous permit cycle to that progress could continue towards achieving reductions and eliminations of non-stormwater discharges to the stormwater system. Some previous goals were divided into separate tasks to better review progress on each while other objectives were more clearly defined so that the assigned personnel have a better idea of what is involved in completing the task. All goals will be annually monitored, reviewed, evaluated and assessed by an individual within the Planning Department with stormwater oversight, but not by the

program's coordinator. The measurement of success of the program will be based on tracking of compliance and avoidance of impacts to water quality from land alteration and construction. Specific measureable goals during the 5-year permit period include, but are not limited to:

- Revise existing ordinances to meet new federal and state permit requirements;
- Review, comment, and/or approve a plan review for each set of documents submitted;
- Adopt a new drainage manual and begin to use in plan reviews within 3 months of adoption;
- Visit, review, and comment on status of each site under construction;
- Document and respond to a minimum of 90% of all complaints (that are not related to flooding);
- Document and respond to 80% of all neighborhood flooding complaints;
- Document all enforcement actions taken (from discussions on construction sites to formal education settings to stop work orders to fines); and
- Perform and document all annual employee training sessions.

Summary of Development/Implementation Schedule

<table>
<tr><th rowspan="2">BMP#</th><th colspan="5">PERMIT YEAR</th></tr>
<tr><th>YR 14-15</th><th>YR 15-16</th><th>YR 16-17</th><th>YR 17-18</th><th>YR 18-19</th></tr>
<tr><td rowspan="2">CRC1</td><td colspan="5">Review and revise stormwater, grading, erosion control, and tree ordinance as needed.</td></tr>
<tr><td>Review existing ordinance for master Municipal Code revisions.</td><td>Monitor existing ordinance for new MS4 permit requirements.</td><td>Draft revisions to existing ordinance due to new MS4 permit requirements.</td><td>Monitor, review, and draft any revisions needed due to NWA Construction BMP manual adoption.</td><td>Monitor, review, and draft any revisions needed due to new EPA MS4 permit requirements.</td></tr>
<tr><td rowspan="2">CRC2</td><td colspan="5">Review and comment on every large-scale development plan, large-scale waiver, and/or subdivision plan submitted for development.</td></tr>
<tr><td colspan="5">Review, comment, and approve or deny each grading permit requested. Grading permits require an approved set of plans.</td></tr>
<tr><td rowspan="2">CRC3</td><td colspan="5">Requiring submitted plans to show and/or explain how Rogers' sediment and erosion control requirements will be met on development sites provides city staff, planning commission, city council, appropriate city committees, the construction community, business owners, and adjoining properties owners and residents to all be aware of the size and scope of the project and the expected controls that will be used to prevent sediment and other erosion from leaving the project site.</td></tr>
<tr><td colspan="2">Evaluate, review, and revise DM as needed.</td><td>Track land alterations and any impacts to drainage basin annually.</td><td>Evaluate and amend as needed to achieve compliance with state permit.</td><td>Program review and assessment.</td></tr>
<tr><td rowspan="2">CRC4</td><td colspan="5">At least one weekly visit to each site with at least one documented monthly inspection of construction and other development locations to observe site BMP conditions, answer questions, resolve potential problems, and prevent failures. Sites receiving complaints are given priority for next-available inspection time over regular site visits and/or inspections. All materials will be made available in both English and non-English languages for site workers.</td></tr>
<tr><td>Conduct inspections on an on-going basis.</td><td>Implement existing Code authority on an ongoing basis.</td><td colspan="3">Review and amend the Code as appropriate.</td></tr>
</table>

BMP#	PERMIT YEAR				
	YR 14-15	YR 15-16	YR 16-17	YR 17-18	YR 18-19
	Create and adopt system for citizen reports and municipal responses to suspected dumping and suspicious liquid discharges within city limits.	Landscape stormwater management and water conservation	Monitor, review and revise as needed the system for citizen reports and municipal responses to suspected dumping and suspicious liquid discharges.	Water quality monitoring	Stream clean-ups
		Implement and enforce existing codes.			
CRC6	Prevention of large problems begins with education of owner/operators and prevention of small messes. Unfortunately, sometimes only enforcement can stop the reoccurrence of events.				
	Get the library of background materials found in the various waterway from the Rogers Water Utilities' samples of past water collections.	Get the library of chemicals and other parameters found in the Rogers Water Utilities' pre-treatment samples of past water collections.	Annually review Report and Response System for repeat violators of ordinance (location; owner/operator; other individual). Apply existing code enforcement options.		
		Implement and enforce existing codes.			
CRC7	Conduct new hire and annual employee training.				
	Obtain training DVD's. Conduct annual training for employees.	Review and update materials. Conduct training for new hires.	Review and update materials. Conduct annual training.	Review and update materials. Conduct training as necessary for new hires.	Review and update materials. Conduct annual training.

Minimum Control Measure #5:
Post-Development Construction Standards

Permit Requirements:

The permittee must:

- Develop, implement, and enforce a program to ensure reduction of pollutants in storm water runoff to the maximum extent practicable (MEP) from new development and redevelopment projects within the permittee's jurisdiction that disturb one acre or more, are part of a larger common plan of development or sale, and/or discharge into the permittee's small MS4. The permittee's program must ensure that developers are aware that controls needed to prevent and minimize water quality impacts.
- Develop and implement strategies that include a combination of structural and/or non-structural BMPs appropriate for the permittee's community.
- Use an ordinance or other legal regulatory mechanism to address construction and post-construction runoff from new and re-development projects to the maximum extent allowable under Federal, State and/or Local laws.
- Ensure adequate long-term operation and maintenance of permanent and long-term BMPs; and
- Ensure adequate enforcement of ordinance or alternative regulatory program.

Applicable City of Rogers BMPs

Post-Development Standards **(PDS):**

PDS1 - Ordinance: Reviews and Revisions
PDS2 - Drainage Manual
PDS3 - Post Construction Requirements
PDS4 - Plan Reviews
PDS5 - Maintenance and Inspections
PDS6 - Enforcement
PDS7 - Long-Term Operations and Management Plans
PDS8 - Pollution Control Guidelines (PCG) and Stormwater Facilities Master Plan (SFMP)
PDS9 - Low Impact Development (LID)

Responsible Parties

- Planning Department
- Building Inspection
- Code Enforcement
- Street Department
- Water and Sewer
- Police Department
- Parks Department
- Recreation Department

Summary of Measurable Goals

The goals below were selected to correspond with goals from the previous permit cycle to that progress could continue towards achieving reductions and eliminations of non-stormwater discharges to the stormwater system. Some previous goals were divided into separate tasks to better review progress on each while other objectives were more clearly defined so that the assigned personnel have a better idea of what is involved in completing the task. All goals will be annually monitored, reviewed, evaluated and assessed by an individual within the Planning Department with stormwater oversight, but not by the program's coordinator.

The regulatory framework for control of post-construction stormwater runoff is contained in the Code of Ordinances and Rogers Drainage Manual. This framework will be refined and expanded as needed to improve the City's capability to achieve reductions in stormwater pollution from new developments through periodic evaluations and updates to the Codes. Measurable goals during the 5-year permit period include, but are not limited to:

- Revise existing ordinances to meet new federal and state permit requirements;
- Review, comment, and/or approve a plan review for each set of documents submitted;
- Adopt a new drainage manual and begin to use in plan reviews within 3 months of adoption;
- Public education and outreach events will be coordinated to educate property and home-owner associations on their operational and maintenance requirements in general as well as for specific BMPs not covered in the general events;
- Develop and implement Pollution Control Guidelines (PCG) for each city-owned or operated site;
- Create a city-wide Stormwater Facilities Master Plan summarizing and containing each PCG; and
- Develop and implement optional methods, criteria, and standards for low-impact stormwater development and low-income housing.

Summary of Development/Implementation Schedule

BMP#	PERMIT YEAR				
	YR 14-15	YR 15-16	YR 16-17	YR 17-18	YR 18-19

BMP#	PERMIT YEAR				
	YR 14-15	**YR 15-16**	**YR 16-17**	**YR 17-18**	**YR 18-19**
PDS1	Review and revise stormwater, grading, erosion control, and tree ordinance as needed.				
	Review existing ordinance for master Municipal Code revisions.	Review existing ordinance for new MS4 permit requirements.	Draft revisions to existing ordinance due to new MS4 permit requirements.	Review and draft any revisions needed due to NWA Construction BMP manual adoption.	Review existing ordinance for new EPA MS4 permit requirements.
PDS2	Review and revise stormwater, grading, erosion control, and tree ordinance as needed for post-construction requirements.				
	Check for completeness of ordinance due to relocation within Municipal Code.	Check for shortages between existing ordinance and new permit requirements.	Remove shortages between existing ordinance and new permit requirements.	Remove un-permitted and add new allowed BMPs	Prepare for new federal requirements that will be applicable with next state permit.
PDS3	Review and comment on every large-scale development plan, large-scale waiver, and/or subdivision plan submitted for development.				
	Review, comment, and approve or deny each grading permit requested. Grading permits require separate approval of set of plans.				
	Requiring submitted plans to show and/or explain how Rogers' sediment and erosion control requirements will be met on development sites provides city staff, planning commission, city council, appropriate city committees, the construction community, business owners, and adjoining properties owners and residents to all be aware of the size and scope of the project and the expected controls that will be used to prevent sediment and other erosion from leaving the project site.				
PDS4	Conduct inspections on an on-going basis.	Implement existing Code authority on an ongoing basis.	Review and amend the Code as appropriate.		
	Planning Dept. and Street Dept. primarily; Code Enforcement and Police Dept. as needed for enforcement; property-owner associations and other private individuals with post-construction stormwater controls on-site; All materials will be made available in both English and non-English languages				
	Training multiple department staffs puts more eyes "on the ground" for finding, reporting, and/or responding to sites where permits and control requirements are not being met. Educating property-owners of their responsibilities prevents unexpected operational and/or maintenance problems, disasters, back-ups, and/or flooding. Felines				
PDS5	Prevention of large problems begins with education of owner/operators and prevention of small messes. Unfortunately, sometimes only enforcement can stop the reoccurrence of events.				
PDS6	Get the library of background materials found in the various waterway from the Rogers Water Utilities' samples of past water collections.	Get the library of chemicals and other parameters found in the Rogers Water Utilities' pre-treatment samples of past water collections.	Annually review Report and Response System for repeat violators of ordinance (location; owner/operator; other individual). Apply existing code enforcement options.		
PDS7	Sediment & Erosion Control, LID, and Green Infrastructure	Landscape stormwater management and water conservation	Storm drain dumping and waste disposals	Pet waste pick-up	Proper use, handling, and disposal of household hazardous wastes
PDS8	Develop and implement Pollution Control Guidelines for each city-owned or operated site.				
	Create a Stormwater Facilities Master Plan should summarize and/or contain a copy of each PCG.				

BMP#	PERMIT YEAR				
	YR 14-15	**YR 15-16**	**YR 16-17**	**YR 17-18**	**YR 18-19**
	A Pollution Control Guideline for each site will make it easier for new employees to learn how to clean their site and other city facilities clean. Experienced employees will find the PCG a handy reference if they need to deal with some sort of spill or other non-hazardous pollution clean-up that is not part of their regular duties.				
PDS9	Low-Impact Development and other development options				
	Other methods and options exist that will minimize the impact of stormwater runoff from development. These methods and options may not currently be ordinance or construction-friendly nor meet all the development requirements. Removing these issues from the development process should allow a greater number of development opportunities. l				